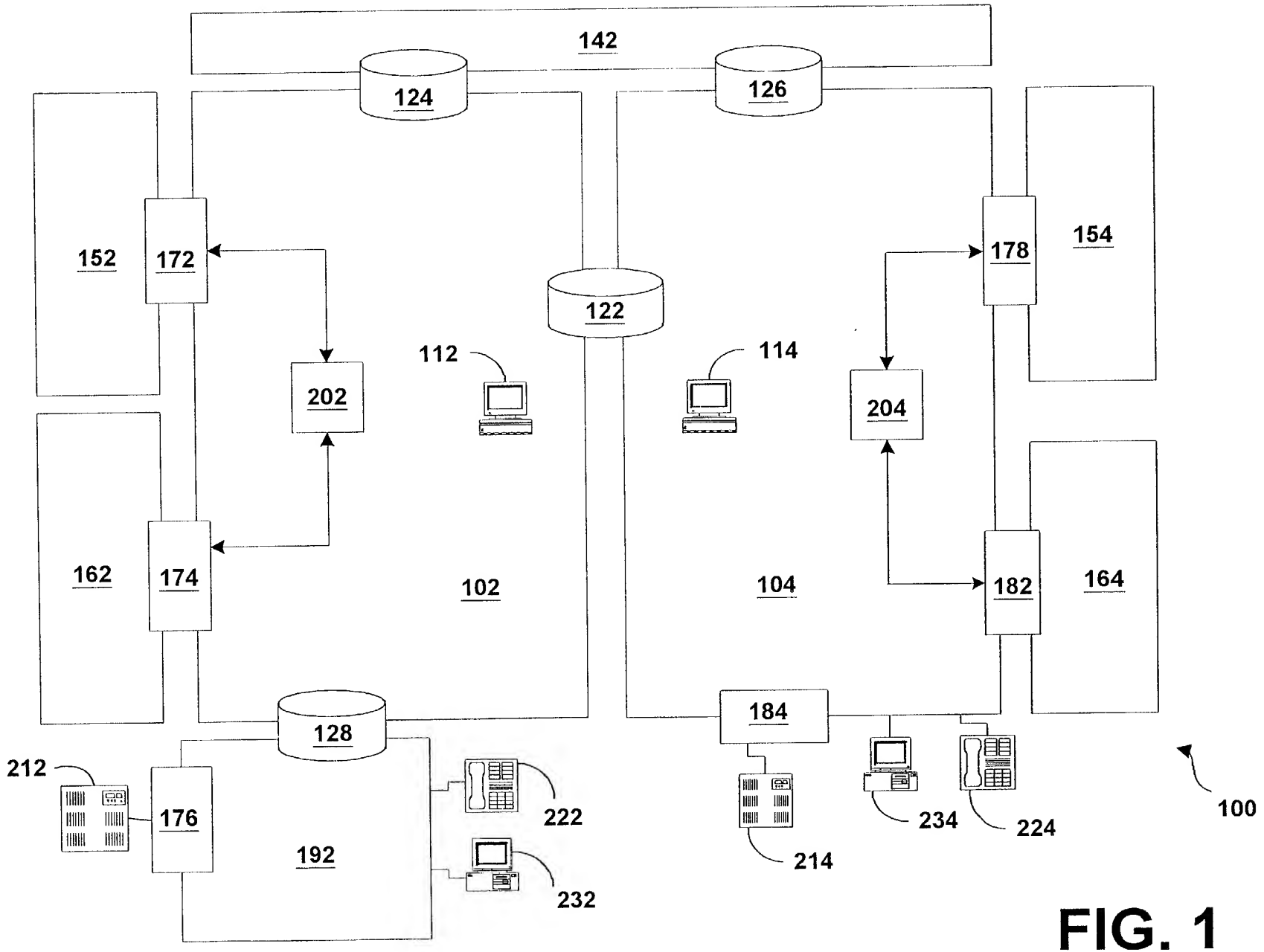

142
124
126
152
172
122
178
154
112
114
202
204
162
174
102
104
182
164
128
184
212
176
192
222
232
214
234
224
100

FIG. 1

Petitioner's Exhibit 1004 - Page 9 of 24

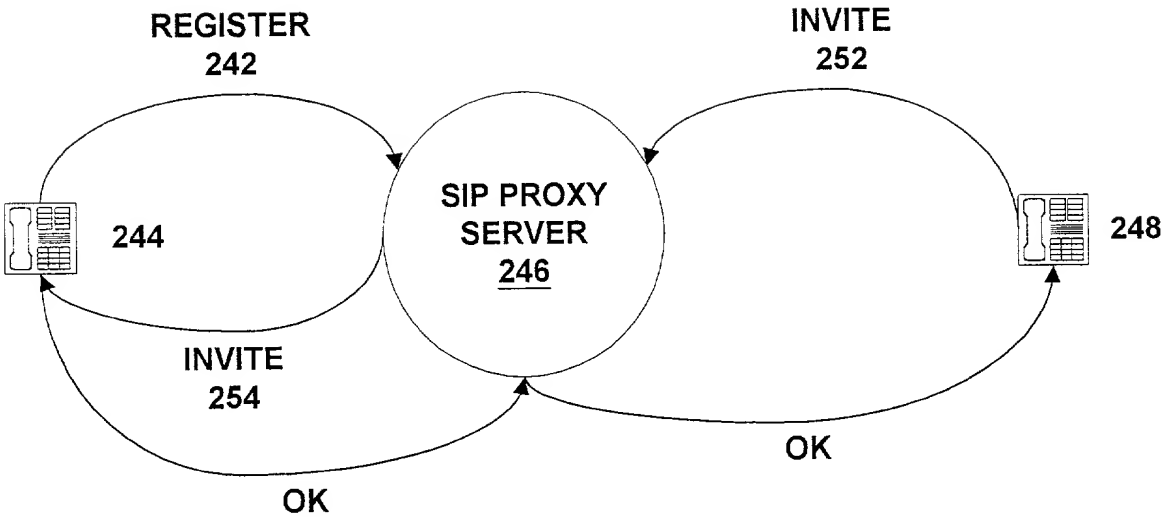


FIG. 2
(PRIOR ART)

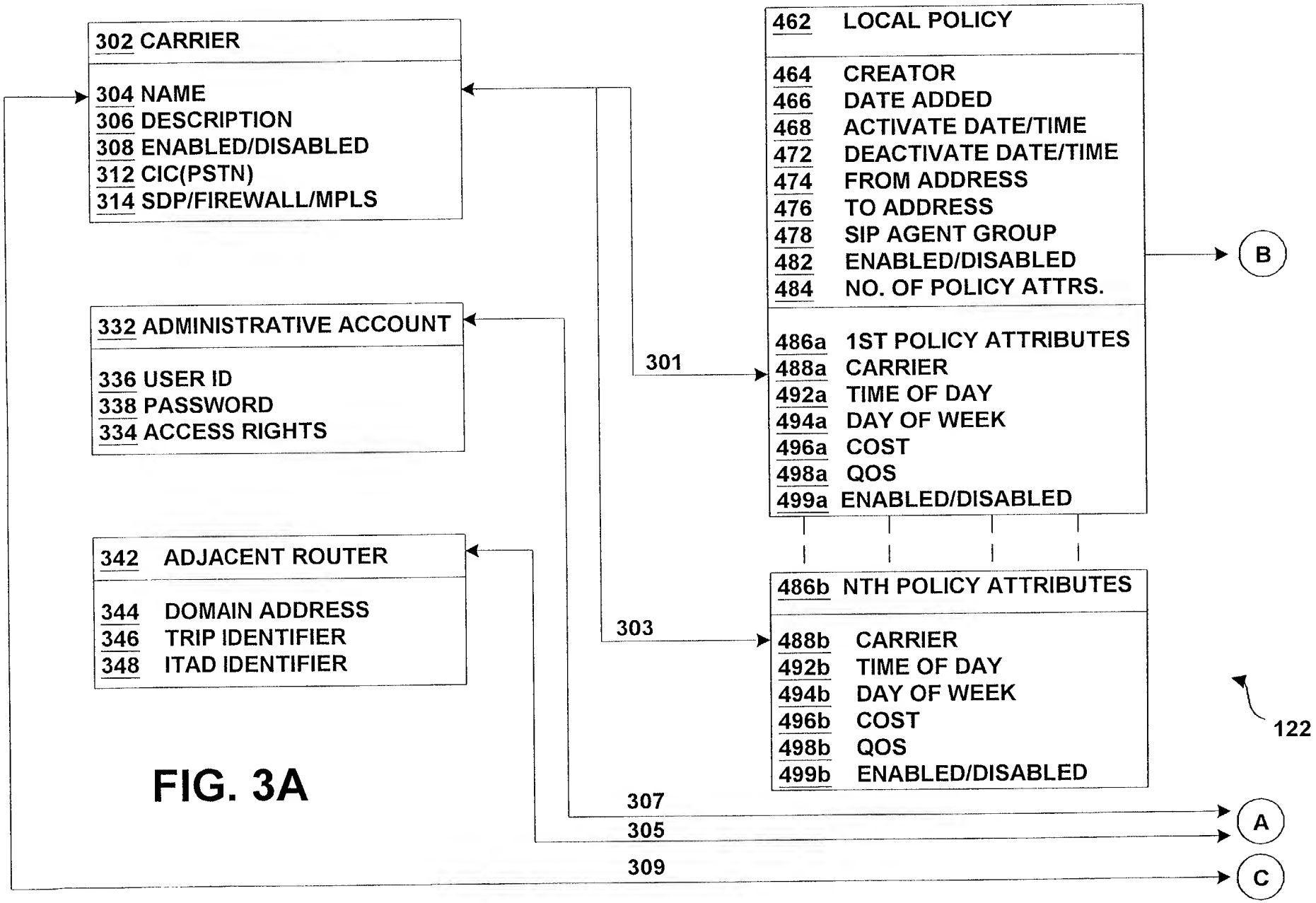

302 CARRIER
304 NAME
306 DESCRIPTION
308 ENABLED/DISABLED
312 CIC(PSTN)
314 SDP/FIREWALL/MPLS
462 LOCAL POLICY
464 CREATOR
466 DATE ADDED
468 ACTIVATE DATE/TIME
472 DEACTIVATE DATE/TIME
474 FROM ADDRESS
476 TO ADDRESS
478 SIP AGENT GROUP
482 ENABLED/DISABLED
484 NO. OF POLICY ATTRS.
B
332 ADMINISTRATIVE ACCOUNT
336 USER ID
338 PASSWORD
334 ACCESS RIGHTS
301
486a 1ST POLICY ATTRIBUTES
488a CARRIER
492a TIME OF DAY
494a DAY OF WEEK
496a COST
498a QOS
499a ENABLED/DISABLED
342 ADJACENT ROUTER
344 DOMAIN ADDRESS
346 TRIP IDENTIFIER
348 ITAD IDENTIFIER
303
486b NTH POLICY ATTRIBUTES
488b CARRIER
492b TIME OF DAY
494b DAY OF WEEK
496b COST
498b QOS
499b ENABLED/DISABLED
122
307
305
A
309
C

FIG. 3A

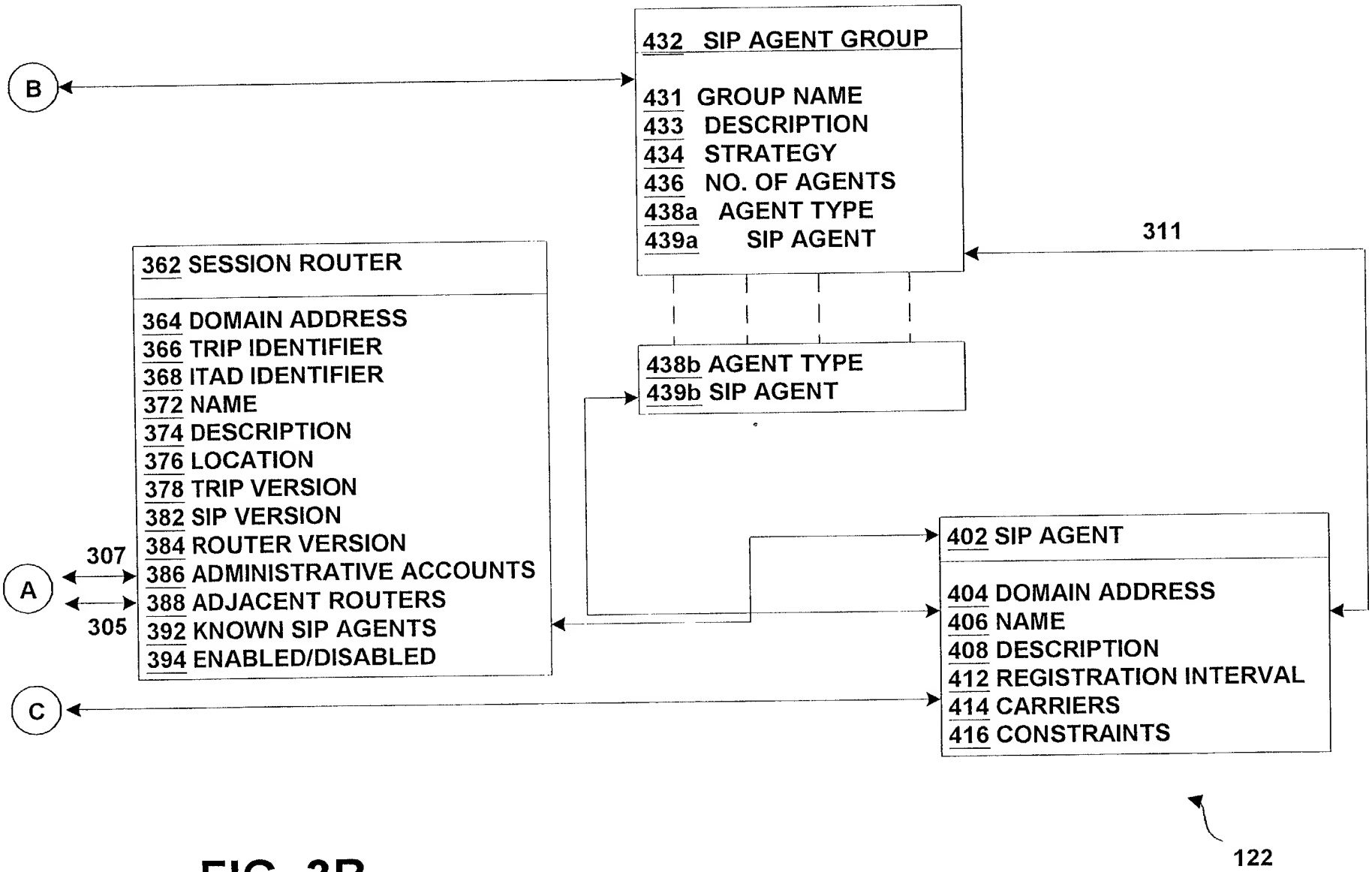

B
432 SIP AGENT GROUP
431 GROUP NAME
433 DESCRIPTION
434 STRATEGY
436 NO. OF AGENTS
438a AGENT TYPE
439a SIP AGENT
311
362 SESSION ROUTER
364 DOMAIN ADDRESS
366 TRIP IDENTIFIER
368 ITAD IDENTIFIER
372 NAME
374 DESCRIPTION
376 LOCATION
378 TRIP VERSION
382 SIP VERSION
384 ROUTER VERSION
386 ADMINISTRATIVE ACCOUNTS
388 ADJACENT ROUTERS
392 KNOWN SIP AGENTS
394 ENABLED/DISABLED
438b AGENT TYPE
439b SIP AGENT
307
A
305
C
402 SIP AGENT
404 DOMAIN ADDRESS
406 NAME
408 DESCRIPTION
412 REGISTRATION INTERVAL
414 CARRIERS
416 CONSTRAINTS
122

FIG. 3B

TOZ2HO" H86HH860

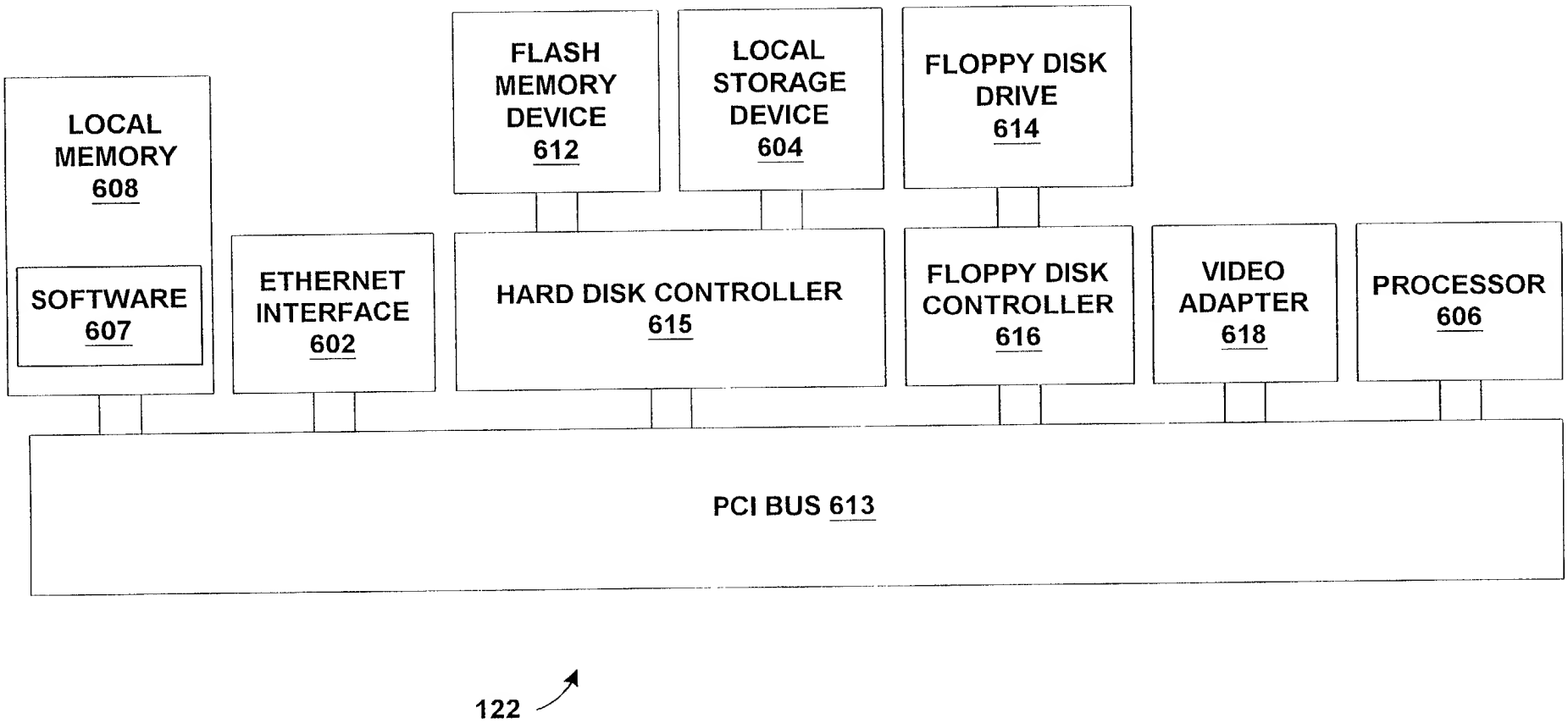


FIG. 4

TO2240 "1861h860

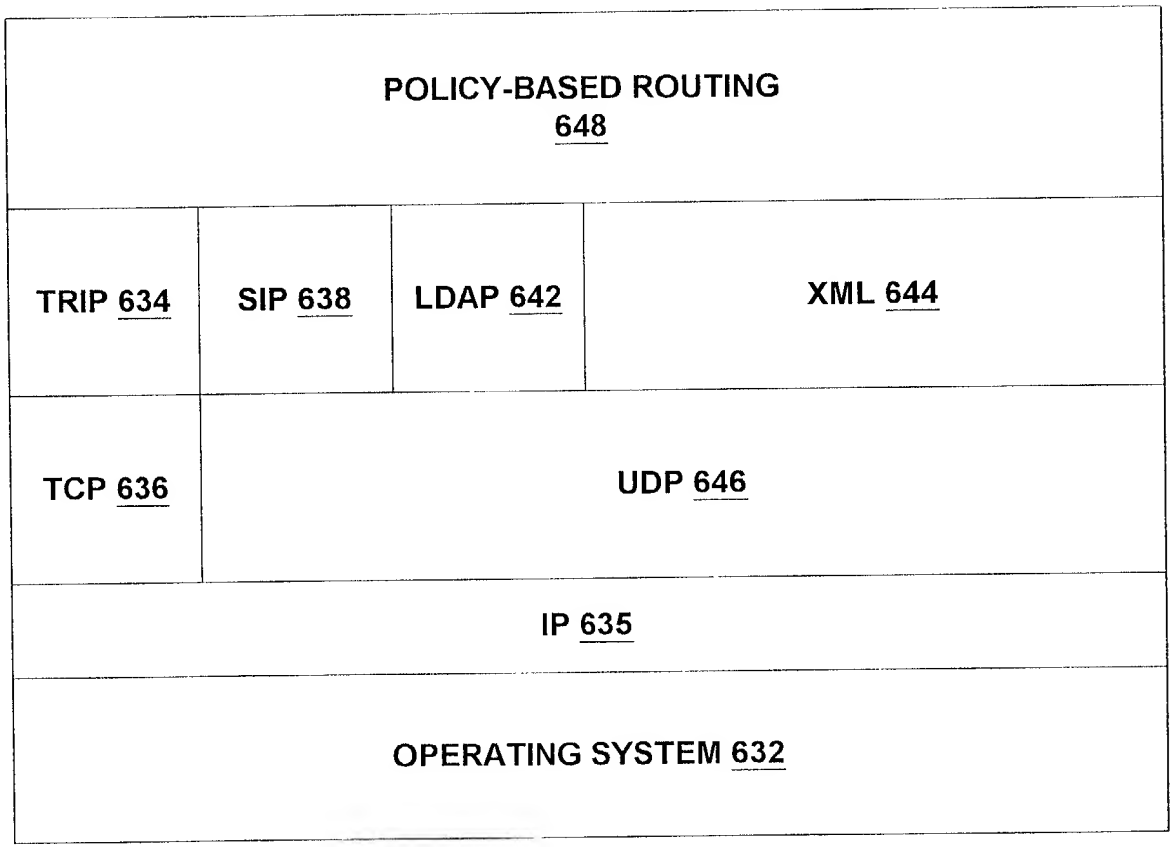


FIG. 5

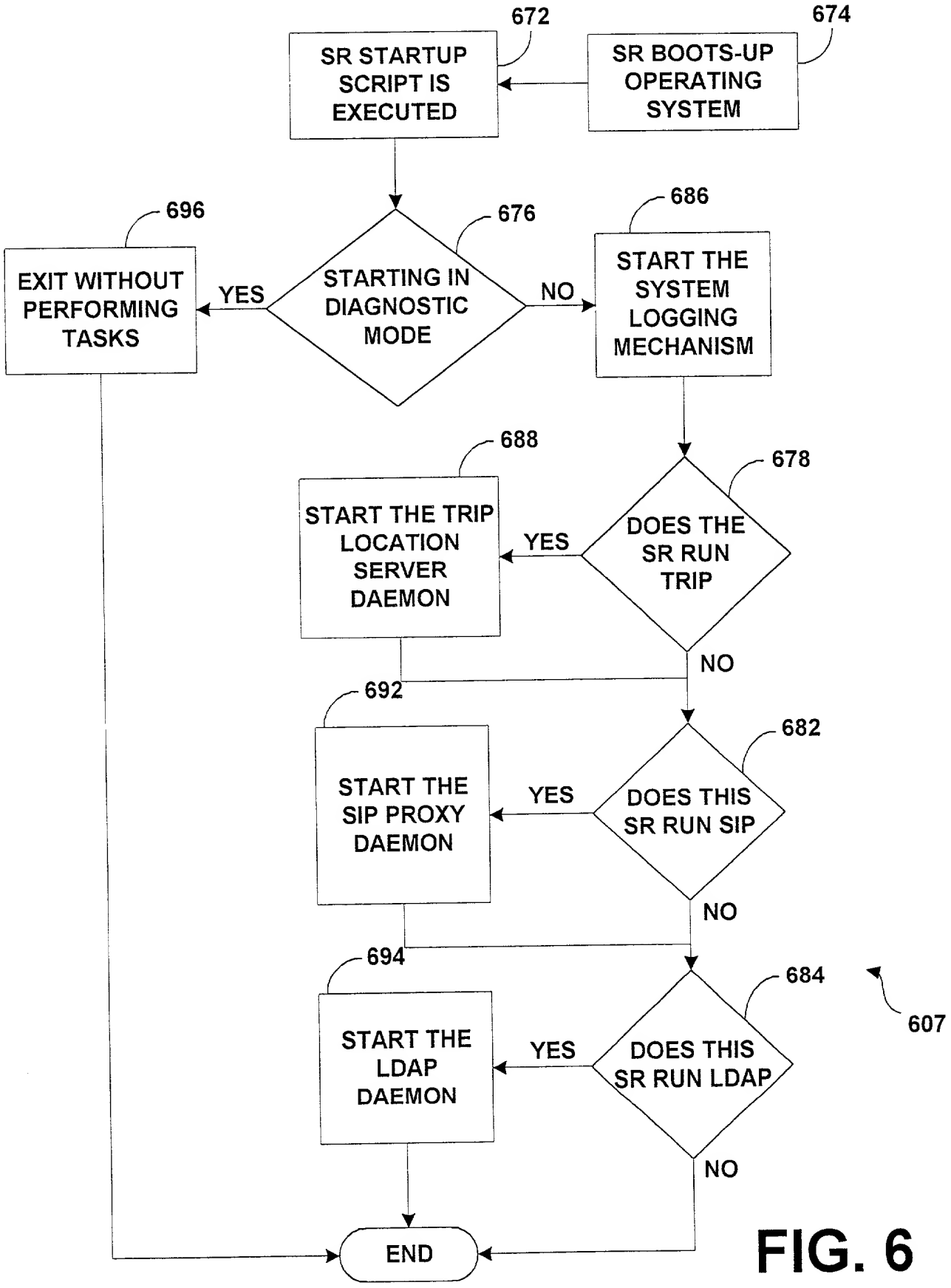

672
SR STARTUP SCRIPT IS EXECUTED
674
SR BOOTS-UP OPERATING SYSTEM
696
EXIT WITHOUT PERFORMING TASKS
YES
676
STARTING IN DIAGNOSTIC MODE
NO
686
START THE SYSTEM LOGGING MECHANISM
688
START THE TRIP LOCATION SERVER DAEMON
YES
678
DOES THE SR RUN TRIP
NO
692
START THE SIP PROXY DAEMON
YES
682
DOES THIS SR RUN SIP
NO
694
START THE LDAP DAEMON
YES
684
DOES THIS SR RUN LDAP
607
NO
END

FIG. 6

TOZ2nO" n86mn36O

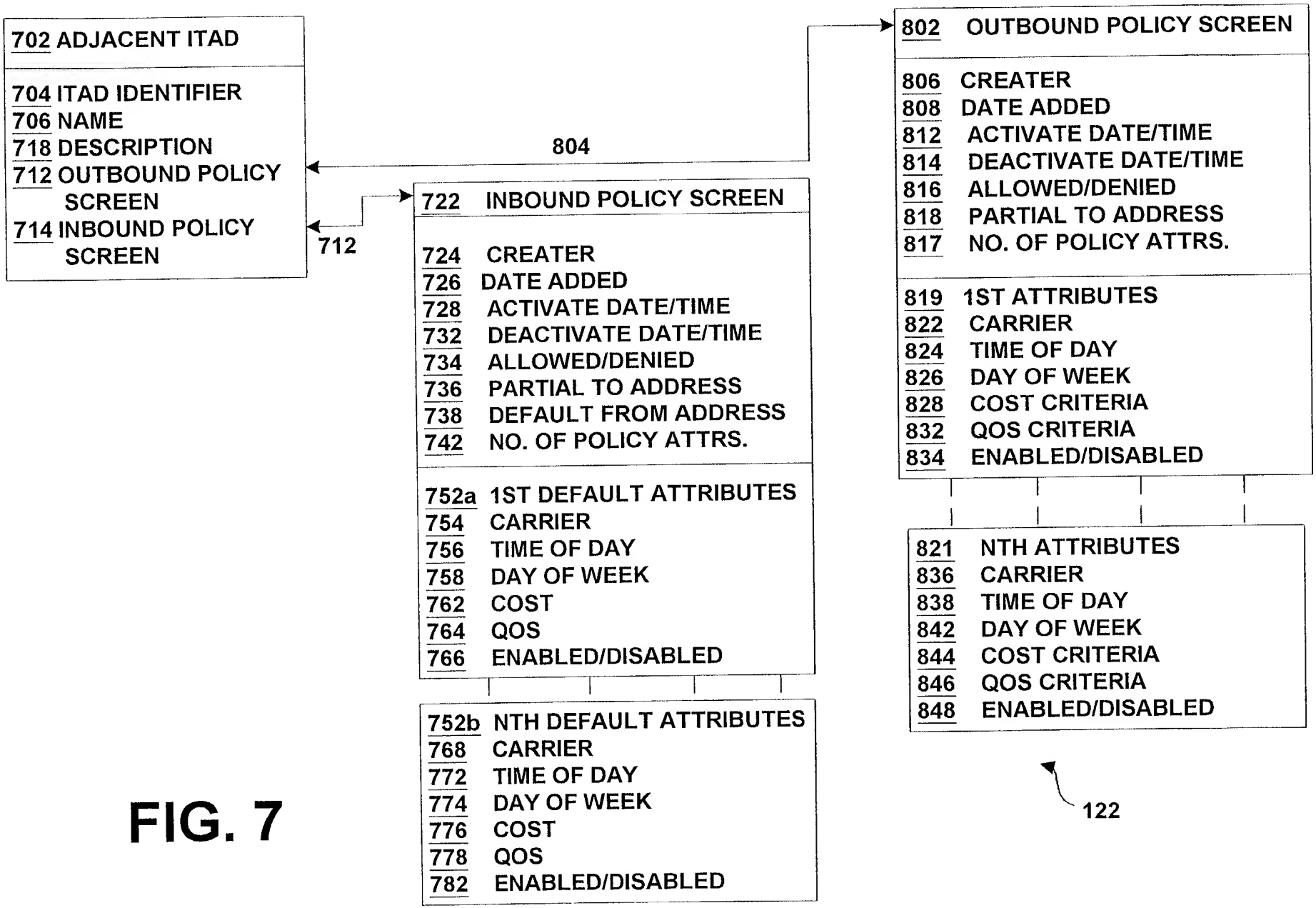


FIG. 7

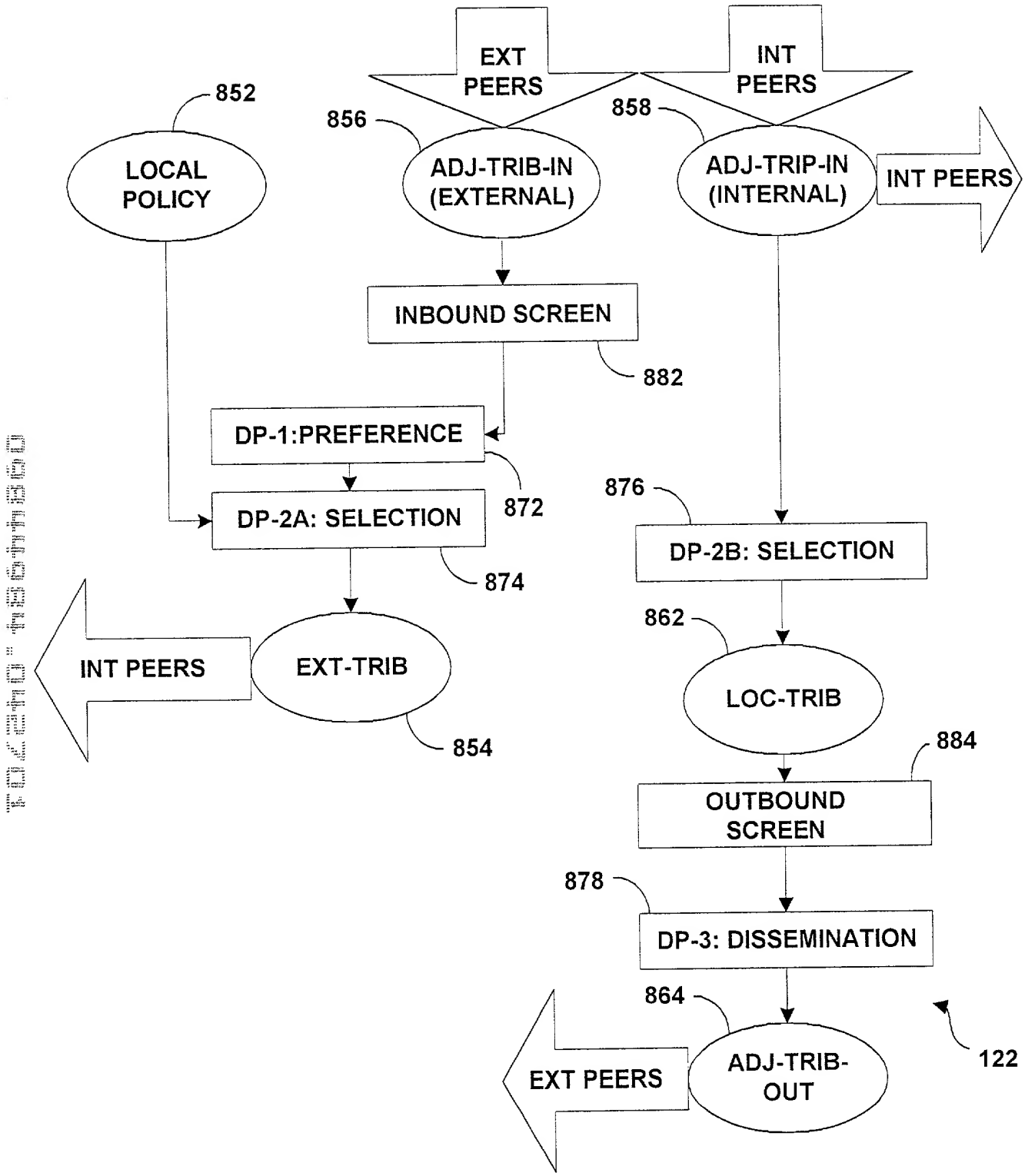

EXT PEERS
INT PEERS
852
856
858
LOCAL POLICY
ADJ-TRIB-IN (EXTERNAL)
ADJ-TRIP-IN (INTERNAL)
INT PEERS
INBOUND SCREEN
882
DP-1:PREFERENCE
872
876
DP-2A: SELECTION
DP-2B: SELECTION
874
862
INT PEERS
EXT-TRIB
LOC-TRIB
854
884
OUTBOUND SCREEN
878
DP-3: DISSEMINATION
864
EXT PEERS
ADJ-TRIB-OUT
122

FIG. 8

TO220" 1861h860

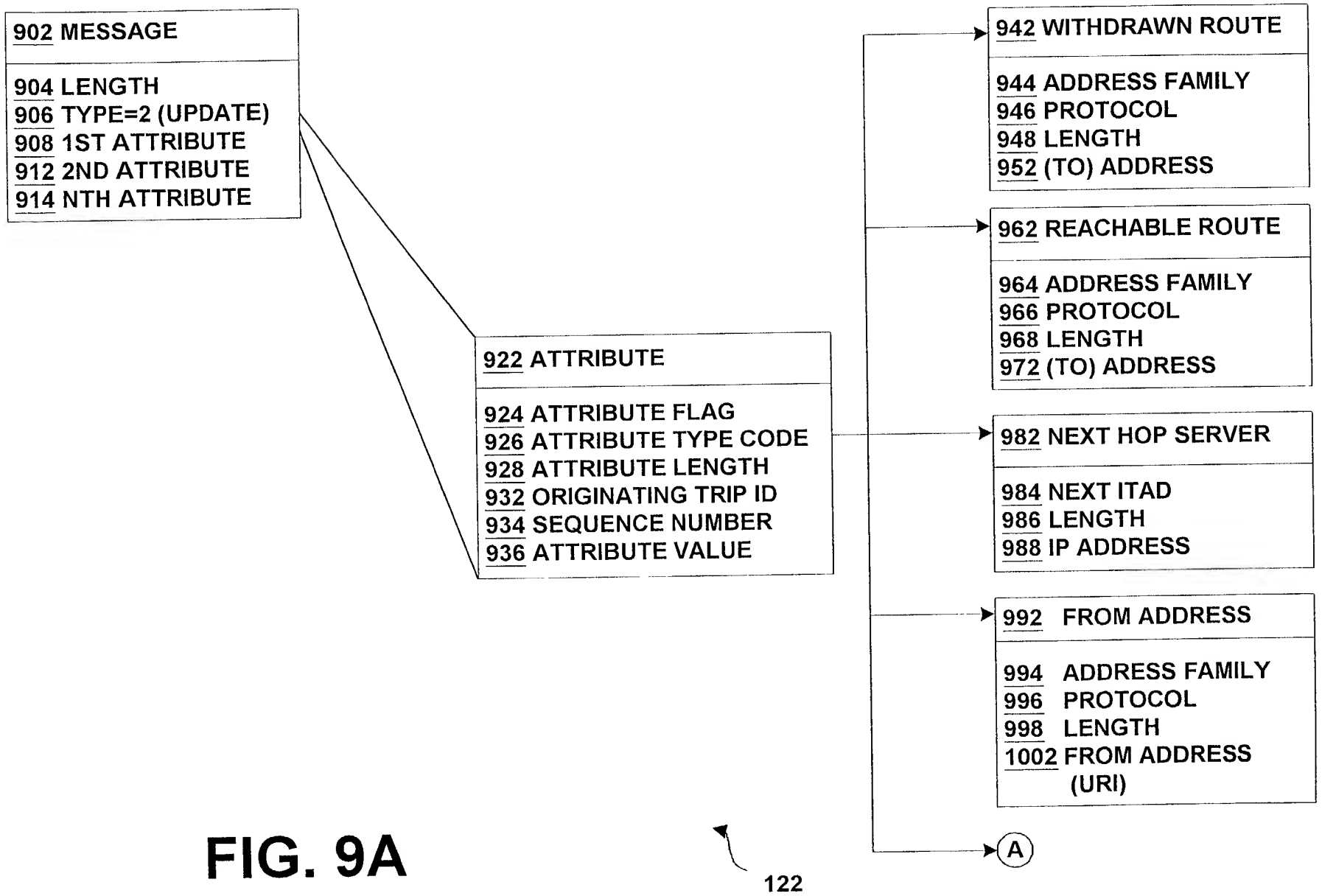


FIG. 9A

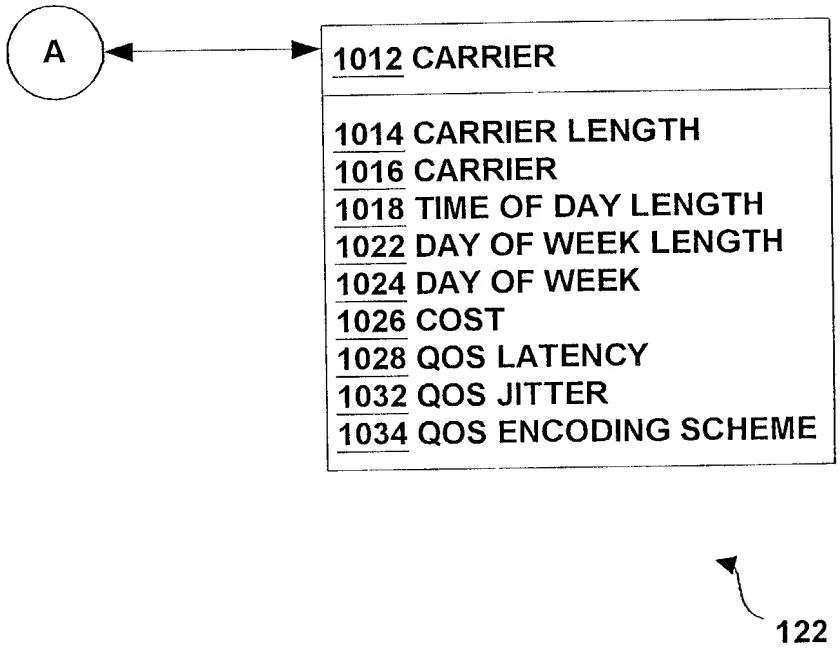
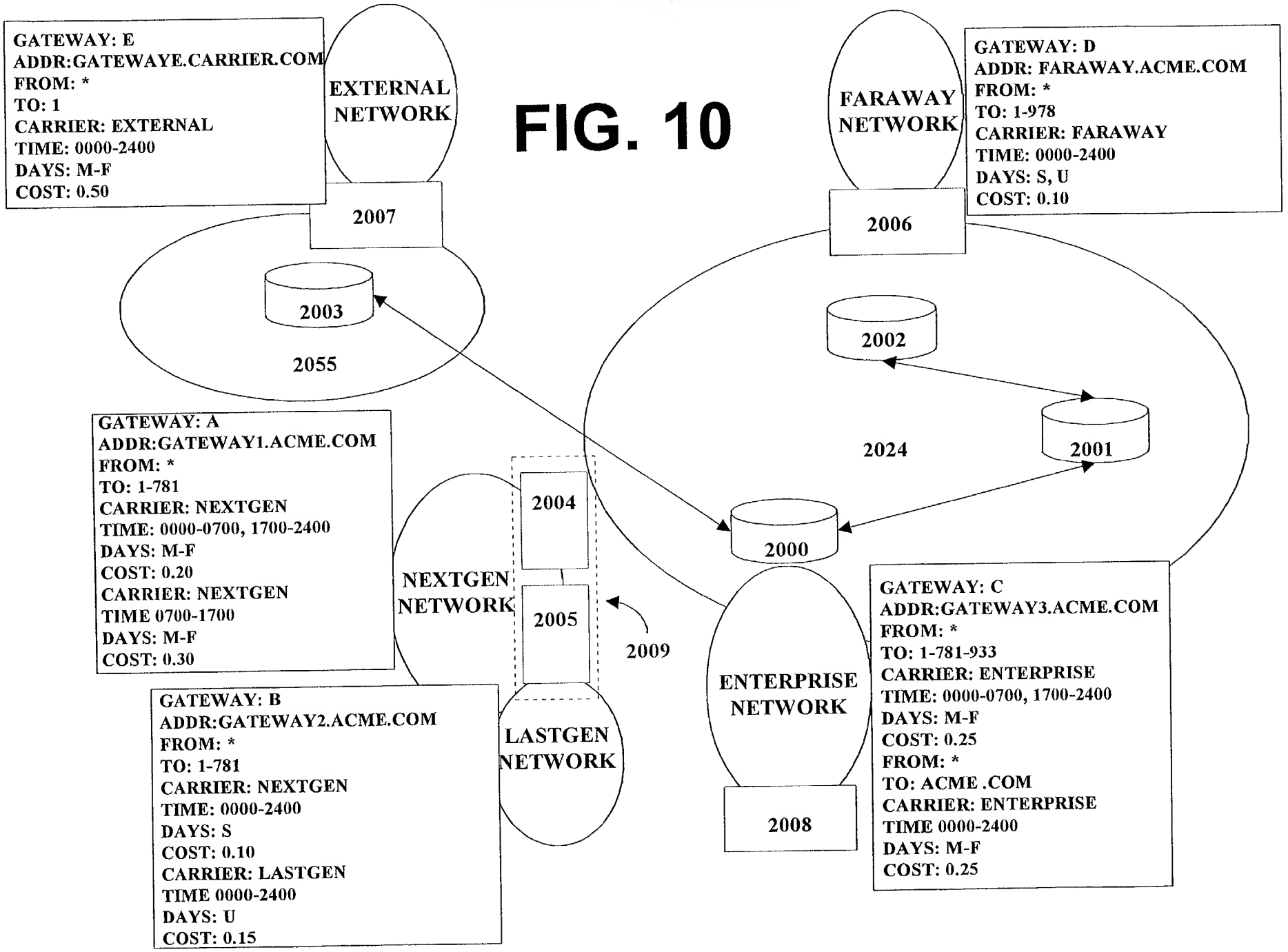

A
1012 CARRIER
1014 CARRIER LENGTH
1016 CARRIER
1018 TIME OF DAY LENGTH
1022 DAY OF WEEK LENGTH
1024 DAY OF WEEK
1026 COST
1028 QOS LATENCY
1032 QOS JITTER
1034 QOS ENCODING SCHEME
122

FIG. 9B

TOZ2nO" n86tn860



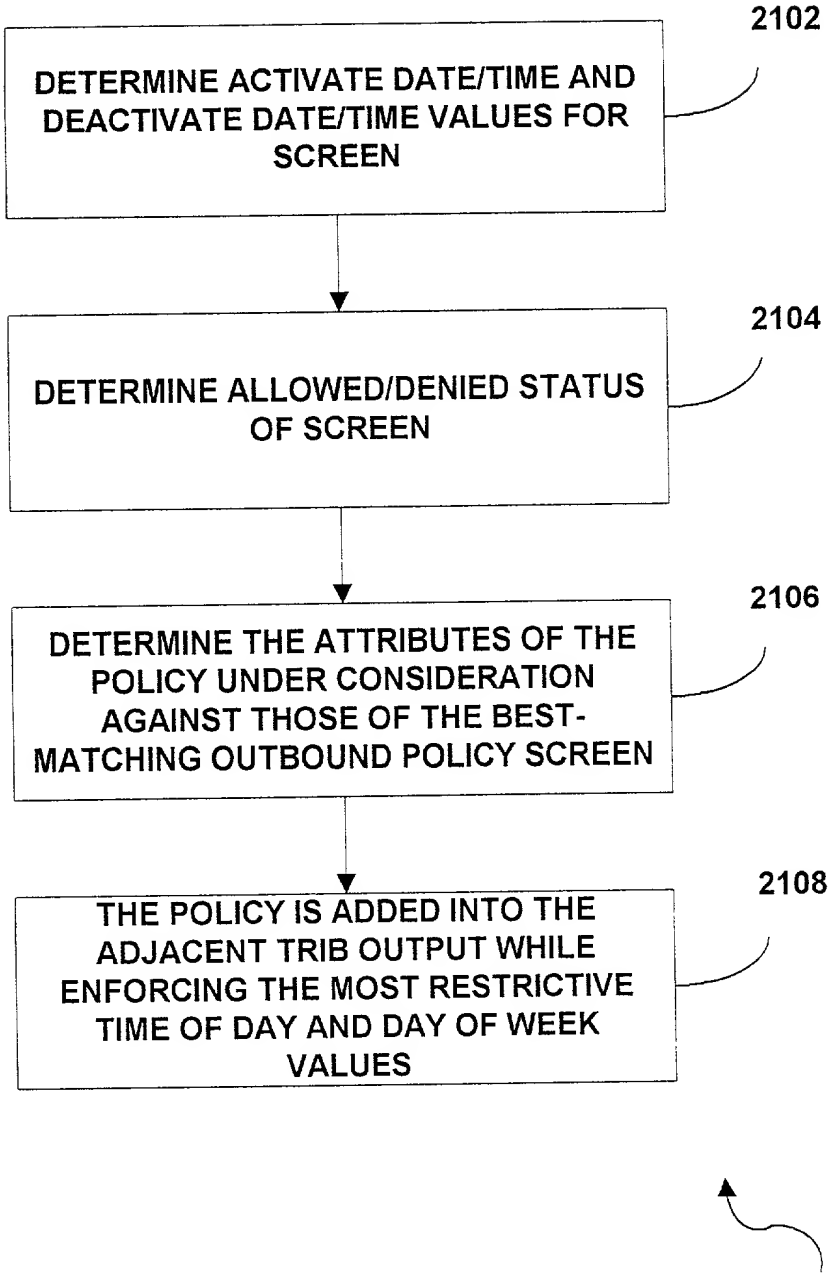

2102
DETERMINE ACTIVATE DATE/TIME AND DEACTIVATE DATE/TIME VALUES FOR SCREEN
2104
DETERMINE ALLOWED/DENIED STATUS OF SCREEN
2106
DETERMINE THE ATTRIBUTES OF THE POLICY UNDER CONSIDERATION AGAINST THOSE OF THE BEST-MATCHING OUTBOUND POLICY SCREEN
2108
THE POLICY IS ADDED INTO THE ADJACENT TRIB OUTPUT WHILE ENFORCING THE MOST RESTRICTIVE TIME OF DAY AND DAY OF WEEK VALUES
122

FIG. 11

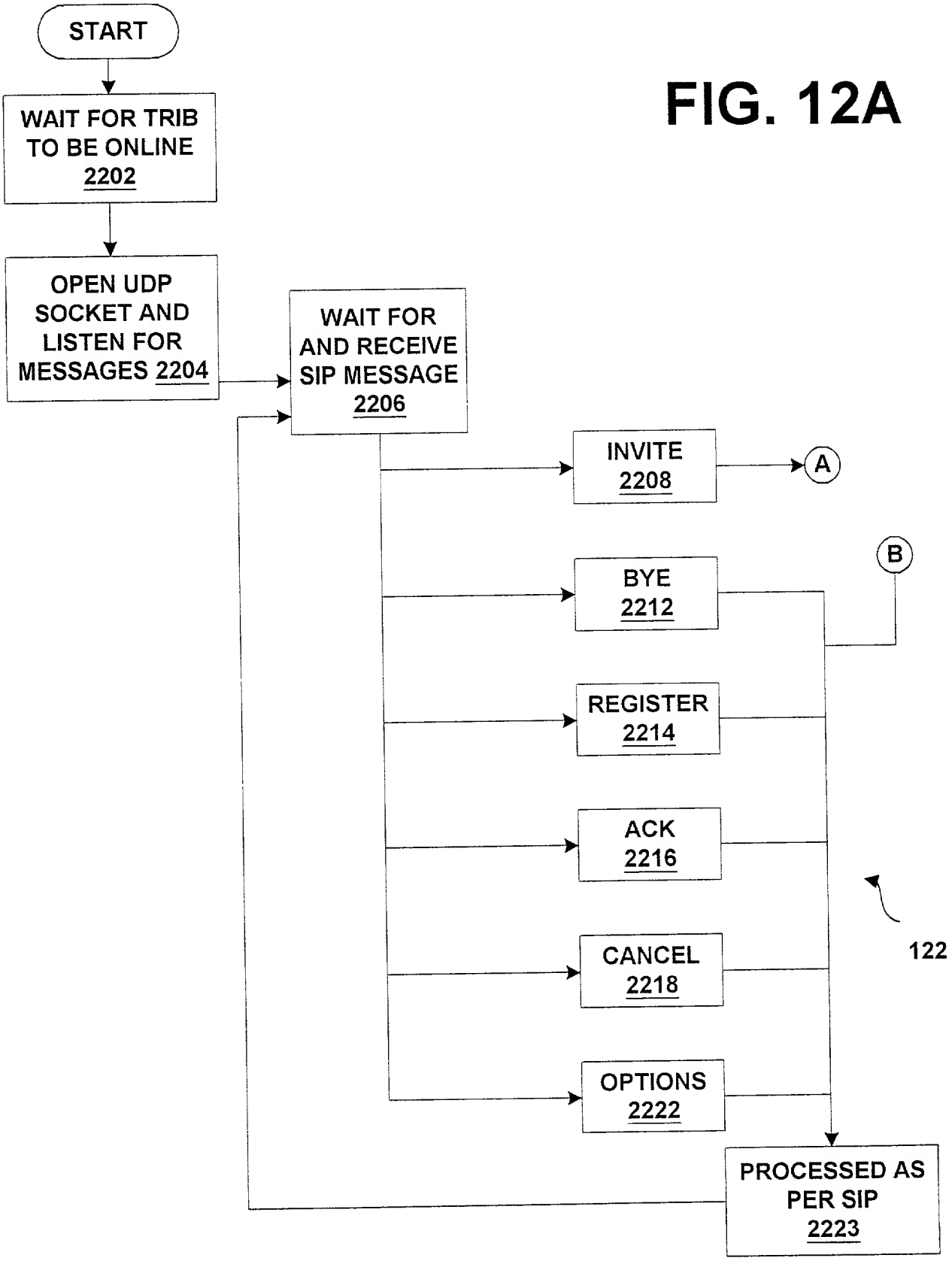

START
WAIT FOR TRIB TO BE ONLINE 2202
OPEN UDP SOCKET AND LISTEN FOR MESSAGES 2204
WAIT FOR AND RECEIVE SIP MESSAGE 2206
INVITE 2208
A
BYE 2212
B
REGISTER 2214
ACK 2216
CANCEL 2218
OPTIONS 2222
PROCESSED AS PER SIP 2223
122

FIG. 12A

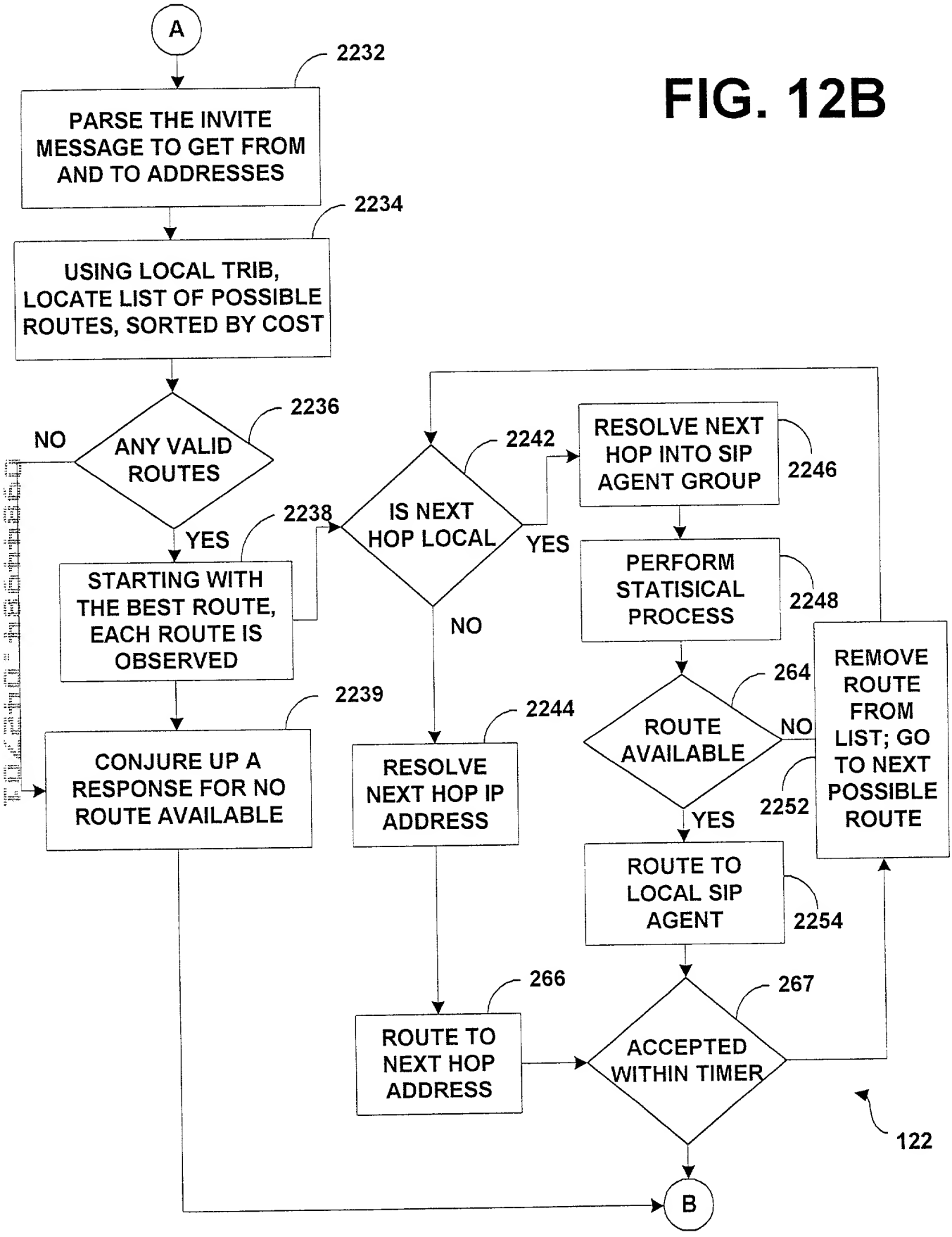

A
2232
PARSE THE INVITE MESSAGE TO GET FROM AND TO ADDRESSES
2234
USING LOCAL TRIB, LOCATE LIST OF POSSIBLE ROUTES, SORTED BY COST
2236
ANY VALID ROUTES
NO
YES
2238
STARTING WITH THE BEST ROUTE, EACH ROUTE IS OBSERVED
2239
CONJURE UP A RESPONSE FOR NO ROUTE AVAILABLE
2242
IS NEXT HOP LOCAL
YES
NO
2244
RESOLVE NEXT HOP IP ADDRESS
266
ROUTE TO NEXT HOP ADDRESS
2246
RESOLVE NEXT HOP INTO SIP AGENT GROUP
2248
PERFORM STATISICAL PROCESS
264
ROUTE AVAILABLE
NO
2252
YES
REMOVE ROUTE FROM LIST; GO TO NEXT POSSIBLE ROUTE
2254
ROUTE TO LOCAL SIP AGENT
267
ACCEPTED WITHIN TIMER
122
B

FIG. 12B

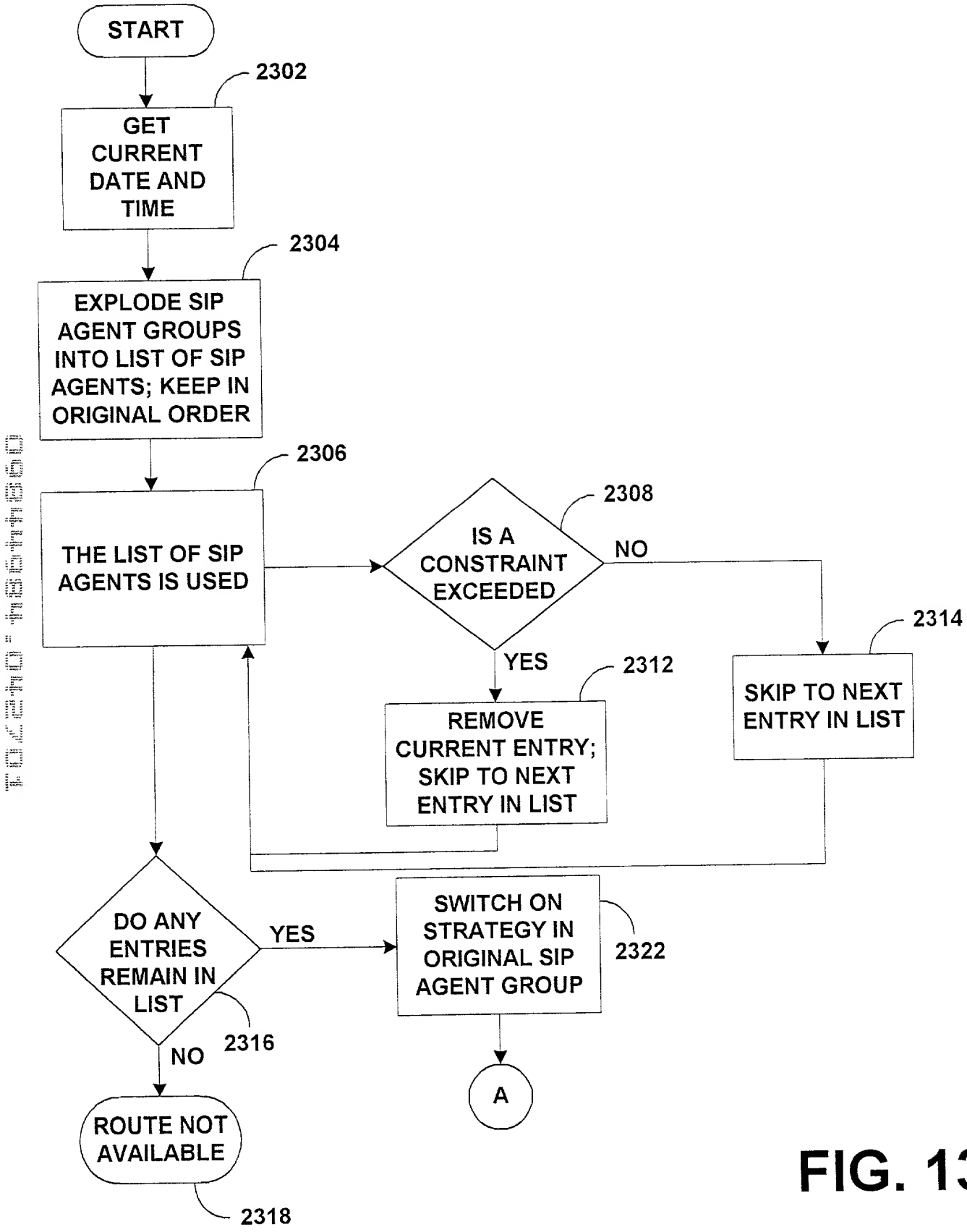

START
2302
GET CURRENT DATE AND TIME
2304
EXPLODE SIP AGENT GROUPS INTO LIST OF SIP AGENTS; KEEP IN ORIGINAL ORDER
2306
THE LIST OF SIP AGENTS IS USED
2308
IS A CONSTRAINT EXCEEDED
NO
YES
2312
REMOVE CURRENT ENTRY; SKIP TO NEXT ENTRY IN LIST
2314
SKIP TO NEXT ENTRY IN LIST
DO ANY ENTRIES REMAIN IN LIST
YES
2316
NO
SWITCH ON STRATEGY IN ORIGINAL SIP AGENT GROUP
2322
A
ROUTE NOT AVAILABLE
2318

FIG. 13A

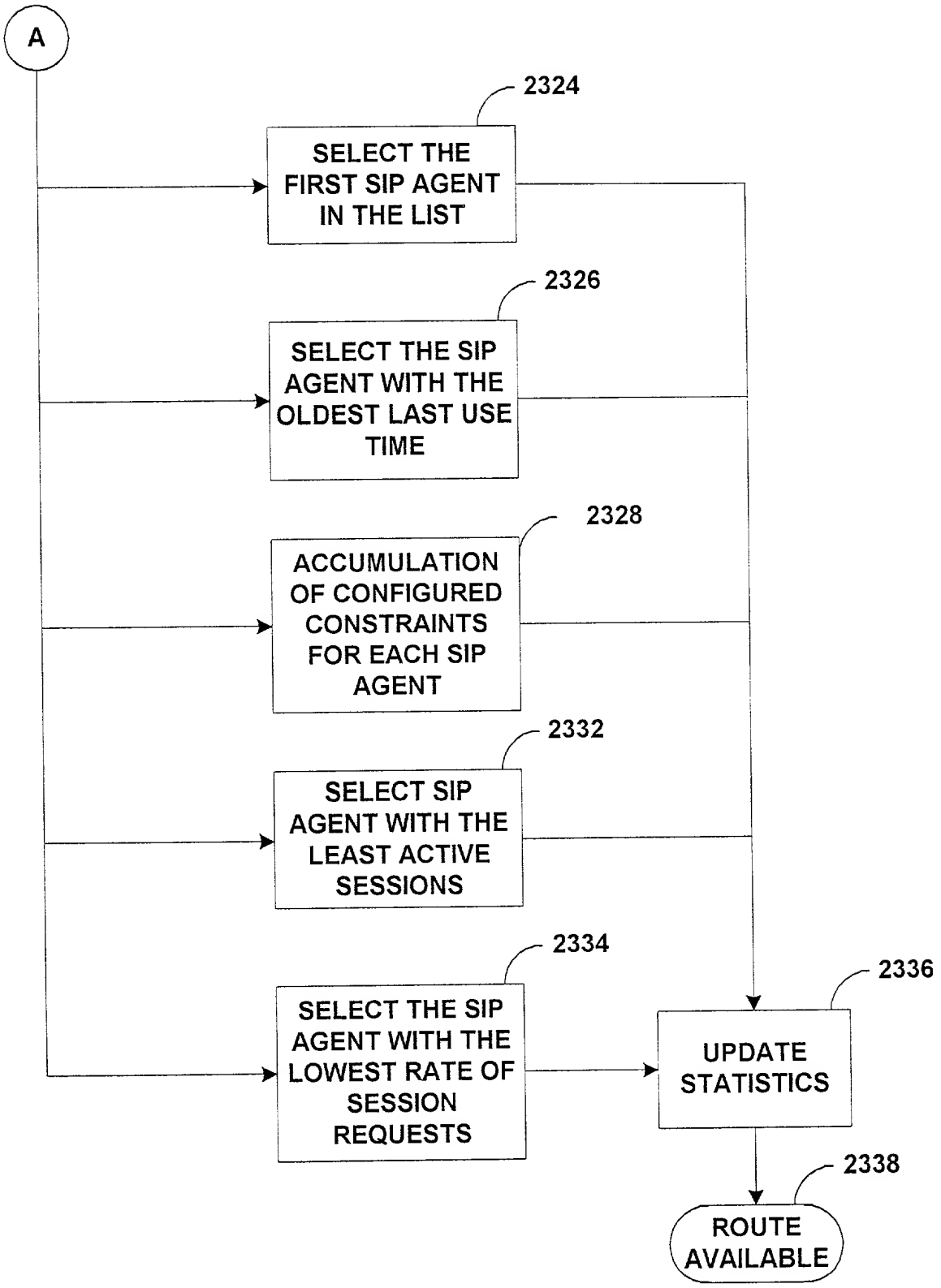

A
2324
SELECT THE FIRST SIP AGENT IN THE LIST
2326
SELECT THE SIP AGENT WITH THE OLDEST LAST USE TIME
2328
ACCUMULATION OF CONFIGURED CONSTRAINTS FOR EACH SIP AGENT
2332
SELECT SIP AGENT WITH THE LEAST ACTIVE SESSIONS
2334
SELECT THE SIP AGENT WITH THE LOWEST RATE OF SESSION REQUESTS
2336
UPDATE STATISTICS
2338
ROUTE AVAILABLE

FIG. 13B

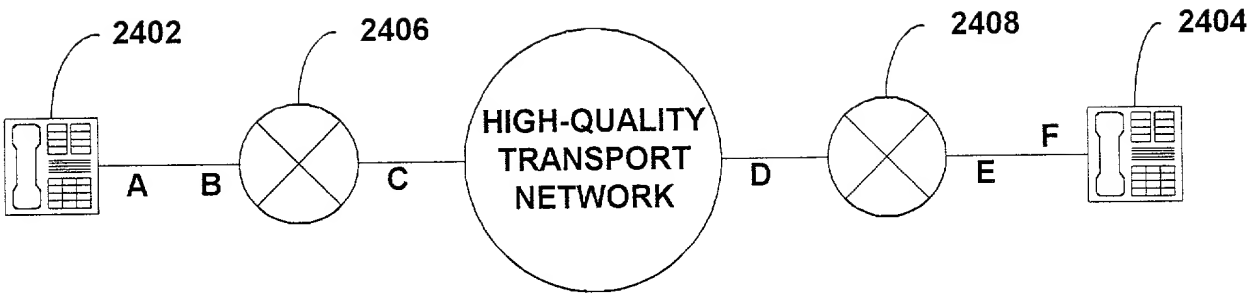


FIG. 14

TOZ3HO 1861860

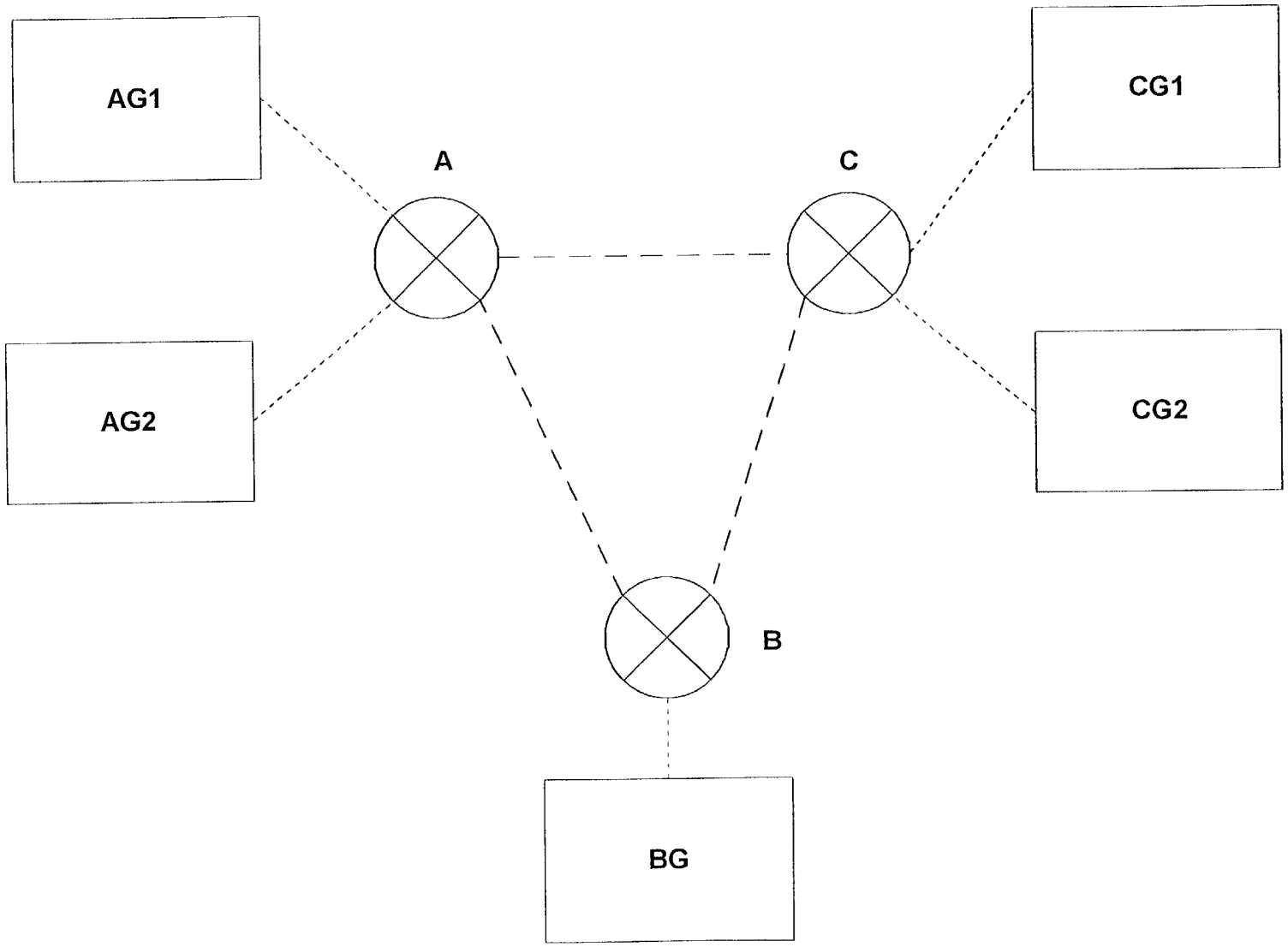


FIG. 15

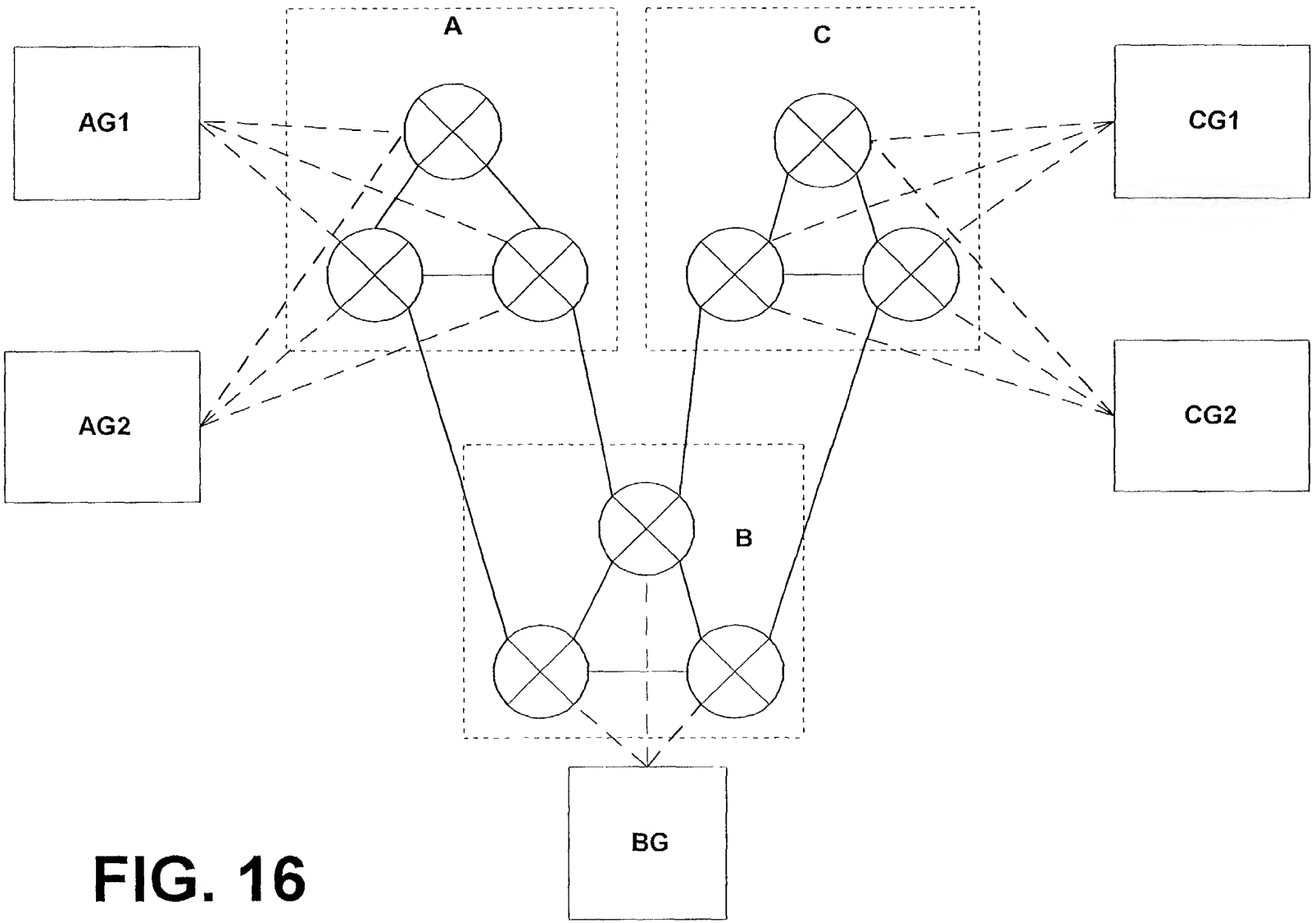


FIG. 16